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APPALACHIAN NURSERIES

W. J. BILLERBECK

L. F. BILLERBECK

FAIRVIEW AVENUE
WAYNESBORO, PENNA.

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**LINERS
FOR SPRING 1960**



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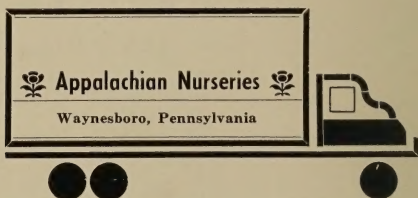
PRICES are FOB Waynesboro, Penna. Delivery by our truck direct to your establishment, at very reasonable rates, or you can pick up the stock with your own truck. We make no shipments by common carriers because packing costs and transportation charges are entirely out of proportion.

TERMS: Usual. No cash discounts are deductible, **BUT YOU DON'T NEED MONEY TO BUY FROM US** — that is, - not now. All you need is a reasonably decent credit reputation and a \$5.00 bill. Regardless of the size of your order, \$5.00 will hold the stock. Then, if your order is \$100. or less, please pay our driver. He is bonded and will receipt your invoice. That saves us office expenses.

If your order is over \$100.00 and you want 30 days from date of delivery, you are welcome to it. Just note on the delivery ticket "Will pay you in 30 days".

Or suppose you would like to place a fairly large order and know you will not have the money to pay for it in 30 days. Tell us your story and we will arrange satisfactory terms if at all possible. So don't let lack of cash keep you from planting.

RATES AND QUANTITY DISCOUNTS: Prices shown are "per 100", but apply to flatfulls. 50-2" banded plants are a flatfull, and 100 rates apply; likewise 24 - 3" banded plants, or 20 - 3" clay pots, or 11 - 4" clay pots, in each case make a flatfull, and the 100 rates apply. To illustrate, 50 Abielias in 2" bands are a flatfull, and 100 rate applies; but, 11 Magnolias in 4" pots are a flatfull, and are sold at 100 rate for the 11 plants. 300 or more plants of a single variety are sold at 5% off the 100 rate quoted; 1000 or more plants of a single variety are sold at 10% off the 100 rate.



OUR TRUCK DELIVERY SERVICE: Because present day packing and transportation costs are much too high, we make deliveries with our own trucks. The trucks are equipped with special bodies, and the plants are delivered in flats; thus there is no packing charge. Deliveries are made statewide to the following: Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia and West Virginia. We will deliver anywhere we can accumulate orders for a full minimum load. Deliveries will be made of lots of any quantities in the areas and states mentioned above.

DELIVERY CHARGES: See pages 36 to 38.



Super-service

This year the emphasis is on SERVICE. Not only does papa Appalachian give you the most in plants for your liner dollar; — the SERVICE is out of this world.

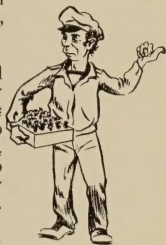
Suppose we take a look at this SUPERSERVICE to see how you profit by it.

First, the plants are not “knocked out” of anything. If you order plants in bands they are left in the flats. The flats go with the plants, and are yours. Plants in clay pots are left in the pots. The pots are yours. No scramble to unpack and repot when the plants arrive. Nothing to soil your disposition! You save the repotting labor costs too.

Each plant is growing in its individual root package. If your ground is too wet or too dry, set the flats of plants where they will be watered now and then and they will keep right on growing. Clay pots should be plunged in sand, peat, sawdust or soil. Otherwise the pots will dry out too quickly.

Most nurseries charge you for packing. If they “pack free” the cost is hidden in the prices of their stock. Like everything else today, packing materials are sky high. You hate to throw the packing crates and boxes away because they cost you plenty. So they sit around the place in an unsightly pile until they rot out. You finally burn them, but they represent a nice hunk of the cost of the plants you bought. Your plants just cost you that much more. Our plants are not packed, so there is no packing charge.

Every plant we sell (unless you call here for your stock) is delivered by our trucks right to the customer's door. No delays in transit; no damaged merchandise; no frozen, “heated”, or moldy stock; — no troubles. That saves you money and is mighty convenient for you.



Our transportation charges are so low you wouldn't believe it. Here's how they are set. We use the 1949 (not 1959) Railway Express Second (lowest) Class Rate to your town. The weight of your shipment is calculated and this 1949 Second Class Rate is applied. Then the following discounts are deducted.

1 to 19 flats	25%
20 to 99 flats	33-1/3%
100 to 269 flats	50%
270 or over	66-2/3%
Minimum charge	\$2.00



In many cases the charge for delivery of a shipment figures out less than the LCL (less than carload) Railway Freight rate. That's the finest kind of service, and it puts the plants in your hands in the very best condition, and at the lowest possible cost.

Maybe you'd like to know how much difference there is between our charges for truck delivery as compared to RR Express. Suppose we use as an illustration a shipment of 1000 plants to Cleveland, Ohio. R. R. Express charges would be \$38.82. Our charge is \$13.40 and that is on our "Rate B". As the size of the shipment increases, (as shown on pages 36 to 38) the rates go lower. So you save a lot of money on transportation. Actually, many of our customers ask how we can do it for so little.

With nearly forty years of nursery experience behind us, we hazard the thought that we know a bit about the problems of the nurseryman, regardless of the size of his operation. We've seen wet springs, dry springs, late springs and early springs. In fact, no spring has ever been long enough with just the right moisture and nice days. What we would like, gentlemen, is a spring that rains only on Sundays, and all other days cool but not too cool, bright but not too bright, enough breeze to dry off the surface, but not enough to blow down the trees that didn't get staked; all of the customers home when their stuff is dug and ready to plant. And enough of the customers paying cash so that you don't have to go to the bank and borrow several thousand bucks to meet payrolls at a time when you're supposed to have money; — that will be the day!

All of this, of course, is leading up to another "commercial". If you buy liners from beds, you must prepare the ground at a time when it is most inconvenient. Not only is it usually too wet to plow and disc the ground, but you can hardly afford to take the time out anyway. You are too busy getting stock out for your customers. The solution is to get your banded & potted liners from Appalachian Nurseries. Take care of your customers first. Forget planting



for yourself until after you have squeezed every possible dollar out of sales. Then, when you have time to think, prepare your ground properly, and plant. Our deliveries do not start until after the first of May, and by then the weather has "settled".

So, you see, Appalachian's SUPERSERVICE is not a dreamed up myth, but really a carefully planned program to make money for you.



WATERING PLANTS

Most fancy pictures of fancy roses show blooms with a few droplets of dew on the petals. That's supposed to entrance you so that you get out of bed real early, "while the dew is on the rose" and cut a bouquet for your better half. (Imagine yourself doing that now!)

Actually, that dewdrop is the result of quite some combination of nature's tricks, involving the principles of refrigeration, condensation, and a number of other basic scientific rules. But all that takes us away from our line of thought. Here we are concerned with proper watering of plants to get the best growth.

Many articles about watering leave the impression that the more you water them, the faster plants will grow. Nothing could be more false. Actually, very few plants like to be wet for any great length of time. Silver Maples, Poplars, and Willows, for instance, all of which are deep rooted, will live in much wetter locations than Norway Maples, Yews, and most Spruces. The last three root close to the surface simply because they don't like "wet feet". Most plants want moisture of about the level you will find in a field of good soil which has been well tilled and is reasonably drained.



They not only require moisture at such a level, but as aeration improves the better the plants like living conditions, so the better they grow. That's the reason for adding humus to soils. The humus aids drainage, supplies plantfoods, prevents erosion by absorbing heavy rains rather than allowing the water to run off, holds moisture in ideal or optimum amounts, and last, but of great importance, greatly improves aeration. That's the combination that plants like.

Needless to say, it is impossible to have good aeration without good drainage. Excess water prevents the movement of air in the soil. So good drainage to aid aeration, combined with large soil particles which will hold the right quantity of moisture make for the ideal combination, and are probably most important. Obviously, plantfoods are needed, and the pH (sourness or sweetness) is of some importance. However, as optimum aeration is approached, less food is needed simply because it stays nearer the surface longer, and thus is used instead of being leached away. Also, pH becomes less important, and plant growth becomes stronger and better.

If you take a trip down the Rhine River you will see terraces up beside the cliffs bordering the stream. These terraces (our U. S. Conservation Bureau would call them "contours") run in and out around the bluffs, and tip backward to prevent water from draining down the face of the hill. They have been



hacked out by hand labor. Some places they are narrow with only room for a couple of rows of grape vines. Other places they are wider with room for eight, ten, or more rows. Many of these vineyards have been in the same families for generations. During those same generations stable manure has been carried in baskets up these steep grades by humans, and the fruit has been brought down in the same manner. Tilling and all other operations are by hand even today, and yet, from these vineyards come grapes that make the very finest European wines.

Now, we aren't trying to sell you a jug of wine; — we just want to point up to you the struggle by humans over the centuries in their great effort to grow more and better plants on the face of this globe. We could take you to China, India, and other countries the world over, and you would note that those which have been inhabited longest show the results of the most work to change the contours and complexion of the soils, and thus help nature to increase productiveness.

All this work has been done with the soil, and a lot of it the hard way. Except to build dams for the purpose of lifting water levels for irrigating purposes or flood control, or to trap water for rice paddies, nothing has been done with water. Definitely nothing has been done to change the complexion of water.

Let's go back to the rose bloom you cut for your mama this morning. Hunt up a toothpick and her can of detergent. Dip the toothpick into the detergent and slowly push a very little detergent very close to a droplet of water on one of the petals. What happens? The droplet quickly flattens out so that it becomes a very thin layer of moisture instead of a bubble of water, and somewhat promptly evaporates.

Have you any idea why the droplet remained bubble-like until mixed with the detergent? The answer is that molecules (the very small particles) of water attract each other strongly. The detergent weakened or lessened the molecular attraction of the water, and the bubble simply fell apart. (The detergent has acted as what is called a "wetting agent" for lack of a better name. We have always thought of "wetting agents" as little boys two years and less.)



Scientists have given this molecular attraction a name. They call it "tension". When you put together several droplets, you come to a point where their total weight is great enough so that the tension of



the water is less than the pull of gravity, and you have a drop of water which quickly rolls off to the ground.

There are metal tensions, soil tensions, water tensions, and tensions of hundreds of other substances. Iron, for instance, has a terrifically high tension. A pie crust may stick together, depending upon your queen's ability, but the tension is very low.

We are not interested here with iron or pies; instead let's go back to soils and water.

Water poured over clean dry sand goes thru it promptly and the sand is soon dry again. Add some clay to the sand and soak it. The water goes thru much more slowly, and the mix stays moist longer because the clay absorbs and holds the moisture longer. Pure dry clay requires a lot of water to soak it, and holds an excess of moisture over a long period. The sand has low tension; and sand-clay has moderate tension, and the pure clay has high tension.

Plants can draw moisture and plantfoods very easily from sand, but because water runs thru and plantfoods leach quickly, much watering and feeding is required. If the sand is coarse, aeration is good, and plants are happy, so they grow well — but need a lot of care.

The sand-clay mix is better. Water drains down moderately, leaving a longer lasting moisture level; plantfoods don't leach away so quickly, and aeration is fair.

Clay stays too wet too long. Fertilizers do stay put, but aeration is poor. The result is slow plant growth. In an over-wet situation the water molds take over, killing roots. Often the foliage turns yellow (chlorosis) as a result of lack of aeration. In its struggle to live the plant's energy is used to make new roots closer and closer to the surface. Then, a prolonged dry spell is all that is needed to kill it.



Plants have definite pulling power for removing moisture and food from the soil. If it were possible to keep the sand at the proper food and moisture levels, it would be far the best of the three types of soil listed above. The tension of the sand is low, and plants, having a stable pulling power would find it easy sailing to get moisture and food, and the result would be quick and strong growth. Also, because of the low comparative tension of sand and water, the plant can continue to pull out moisture until the percentage of moisture left in the sand is very low.

When the moisture level becomes low in clay however, the combined tension of the water and clay will act to offset the absorption pull or power of the roots, and plants will wilt even when there is considerable moisture still in the clay.

Now, you can't add detergents to water you use for growing plants. The chemicals in the detergents will



kill them. But it is obvious that if water and soil tensions can be reduced, the medium and heavy soils might turn out to be pretty good or better growing mediums.

Before we heap upon your weary shoulders any more of these highly significant facts do permit us to let our modesty show a bit. Rereading the above we are struck with the thought that Papa Appalachian smells a bit like a longhair. A chronicle of the chronology of this case will clear the contamination.

Actually what happened goes something like this: A couple of years ago one of our good customers put together a mix for canning plants, and it didn't work out exactly as expected. As the mix drained down it pulled away from the can sides, and then shed water like a duck. Our good customer asked for suggestions, and we recommended an experiment with Aqua-Gro, (Aquatrols Corp. of America, 217 Atlantic Ave., Camden, N. J.) a soil-wetting agent we had read about but had not tried. He used it and became very enthusiastic about the stuff, and because his reports were so glowing we decided to make a trial run.

In January '59 we put into containers 10 each of 20 varieties (total 200 plants) of rooted cuttings. Shortly before they started to grow we divided them into two lots of 5 of each variety (total 100 in each lot). One lot of 100 plants was treated with Aqua-Gro, and the other lot was not. Then both lots were moved into one of our frames where they got uniform automatic watering, fertilizing and spraying. Treatment of the entire frame is necessarily uniform.

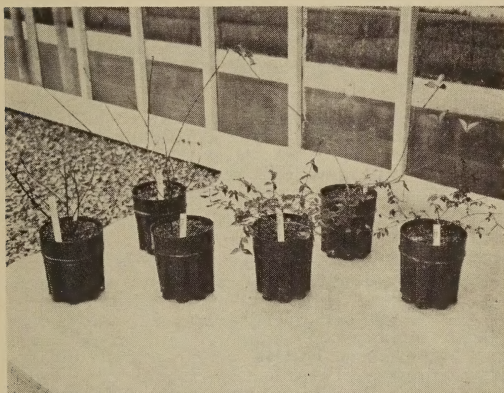


From left to right: First plant is *Thuja occ. globosa* treated; second same variety not treated; third plant is *Juniperus glauca hetzi* treated; fourth is same variety not treated. Back row, left is *Ligustrum lucidum* Pillar treated; right is same variety not treated.

Note the difference. Unfortunately, we did not get photos made before frost hit them, but you will note that plants given only a single treatment of Aqua-Gro are from 1½ to double the size of those not treated.



Aqua-Gro has the same effect upon water as does a detergent, but we are told that it is more highly refined and contains none of the plant killing chemicals found in detergents.



From left to right front row: First plant is *Cornus elegantissima* treated; second plant is *Cornus elegantissima* not treated; third plant is *Abelia grandiflora* treated; fourth plant is *Abelia grandiflora* not treated. Back row, left is *Forsythia Spring Glory* treated; right is *Forsythia Spring Glory* not treated.

In an effort to find out more about it and what it does we think that we have put together some very interesting conclusions.

1. Plants grow bigger and better in potting mediums treated with Aqua-Gro.
2. Less watering and fertilizing is required.
3. Growth is more uniform from plant to plant.
4. Considerably less water-heat scald of foliage.
5. Green moss on pots and containers is greatly reduced, and we don't know why.
6. For washing pots it's "the most". Much, much less toil.
7. Don't be silly and try to use it in irrigation equipment of any kind.
8. On the horizon we see many plant growing problems solved, or at least partially overcome.
9. One gallon treats 16,000 square feet at recommended proportions at a cost of less than 1/10 of a cent per square foot.



Let's go back over these conclusions a bit and elaborate. Combined tensions of water and soil (or for that matter, any potting medium) vary according to density. Aqua-Gro, added to the water apparently nullifies much of this tension. Maybe a good way to put it is to say that the mass of soil and water becomes "slippery", because any excess of water simply "slips" away. Yet, the mass holds an optimum or desirable level of moisture longer. So fewer waterings are needed. After only a single treatment, any added water penetrates the mass immediately.

Next, because the mass has little or no tension, and the pulling power of the plant is unchanged, the plant can pull nearly all of the moisture out and still be happy. So even with fewer waterings, plants do not wilt and suffer. Untreated plants, sitting directly beside those treated, did wilt on occasion, for lack of moisture.

Because moisture acts as the conveyor of plantfoods and, as moisture, when treated, is so much more easily absorbed by the plant, fertilizing can be greatly reduced and yet the plants will make better growth. A larger percentage of the plantfoods are used by the plant. For the same reasons the plants grow uniformly. Consistent availability of moisture and food for all, with optimum aeration from plant to plant, produces uniform growth.

YOU CAN'T GET JAPANESE BEETLES FROM US!

Everything we have on the place, including stock in pots, bands and in the field is certified by the U. S. D. A. to be free of Japanese Beetles. Ask for certificate if your's is a certified nursery.

Many of our good customers have been here and have admired our deep coldframes, of which there are eleven. The frames are equipped with Skinner Irrigation equipment, and look like the answer to any plant grower's prayer. However they have their disadvantages, which, of course, we have not advertised. The Skinner equipment breaks up the water into droplets, and the frames are deep and there is not enough air turbulence down about the plants to shake these droplets off the foliage. When the temperatures are in the 80's or above, it can be expected that a thermometer will record 5 to 15 degrees higher on foliage down in these frames. The result is some heat-water damage to leaves of some types of plants. Particularly susceptible to this damage are many forms of Spiraeas, Hypericum, mucronulata and





mucronatum forms of Azaleas, Exchorda and a few others. We learned that plants treated with Aqua-Gro in very small proportion did not show up with this water-heat damage so long as there was the least trace of the material still on the foliage. The explanation of course is the same as the water bubble on the rose petal. We believe that the first application at recommended strength of one teaspoonful to 4 gals. of water, followed by monthly applications of one teaspoonful to about 10 gals. of water through the summer will prevent all of this scald.

Just why Aqua-Gro discourages the growth of green moss on pots and containers, we don't understand. We know that a single application will not prevent such growth entirely, but there is considerably less moss growth on the pots of treated plants than on those untreated.

Try a little Aqua-Gro in your pot washing water. Use an 18 x 18 inch piece of light grade polyethylene for a dishrag, and after you have them washed, dip them in a solution of Chlorox. Now you're an expert potwasher.

We didn't try to apply Aqua-Gro thru irrigation lines. We intended to, but another experience headed us off. The idea came up that this Aqua-Gro might just be the nuts for cleaning the tractor-sprayer which had been used for everything from spraying to watering to weedburning. So a comparatively strong solution was prepared and dumped into the tank. Before doing this, at least some of the nozzles worked. After adding the Aqua-Gro, nothing worked.



All of the accumulation of gunc and goo collected in the openings. But after tearing the whole piece of equipment apart, and cleaning all of the parts with Aqua-Gro, it operated like a new machine.

After that experience it was decided that it might be smarter not to try Aqua-Gro in the irrigation lines. It's best to apply it with a hose proportioner.

Several experiments planned for the past summer didn't get off the ground. For instance, spraying plants at high temperatures with solutions containing small quantities of Aqua-Gro to see if the usual foliage damage would show up. It didn't get done, but we are anxious to try it. If there is no damage, it will mean that watering can be done at any time of the day instead of evenings or nights during hot weather.

A few years ago some of the colleges and experiment stations came up with results of tests on transferring potted plants to fields. These tests were made to learn if plants grown in pots for one or more years and then transferred to the field started growing promptly, and continued to grow as well as plants from field beds. The results of these tests were reported in most of the trade journals. The conclusions were that roots of potbound plants tended to continue to grow within the small balls of earth



that come out of the pots, and that they were reluctant to go out into the surrounding soil.

This failure of the roots to branch out has several unhappy results. The plants are limited to a great extent, by the amount of plantfood contained within the pot when transferred. Moisture too, might be limited. So they grow poorly. Then, if they are planted to fields of heavy soils, they probably will heave out the following winter.



Now, no grower who pots young plants, even for his own use, goes out into his fields and digs up topsoil for the potting operation. He makes up his potting medium according to his own ideas, and the texture (or complexion) is usually far different from that of the soil in his fields. We believe that this reluctance on the part of the plants to root into the surrounding earth is a matter of soil and water tensions. We have experiments in process to prove or disprove our theory.

Standing around meetings of nurserymen with our teeth in our mouth, we have heard from time to time a comment something like this "Yeah, he's a nice fellow, and grows some beautiful stuff, but his B & B



stock won't grow for me." In most cases these comments have come from nurserymen in heavy soil areas, and are about nurserymen in light soil areas. Aqua-Gro is not going to offset poor digging and balling, or

roots cut too short, but it might go a long way to prevent losses like these. We believe that the loss can often be attributed directly to differences in soil-water tensions, and that these tensions can be more nearly equalized by the use of "wetting agents". We have in process a test to prove or disprove this hypothesis.

Another interesting experiment is in process, but is not far enough along to be assessed. Ten flats of rooted cuttings of *Rhododendron Roseum Elegans* (in 4" bands of straight peat) were selected for uniform size. Five flats were treated with the "wetting agent" and five were not. Four of each lot were placed side by side and receive normal or usual watering. Two (one of each lot) are being kept in a different place and moisture is carried at the highest possible level. Weekly weighing of the flats is recorded to learn just how much moisture each contains. This test, it is hoped, will provide answers to several questions. First, where overwatering (or an uneven job of watering) is done, can we still depend upon the "wetting agent" to carry away the surplus. Next, because *Rhododendrons* must have optimum aeration does the "wetting agent" provide it? Then, when comparisons of growth, health, of both roots and tops are made, we should have some interesting and enlightening information. When this



test is completed it is our intention to plant some of each lot to treated and untreated plots in our clay fields.

That covers our experimental programs at the moment. But there are other important points which should be mentioned. It might be deduced from the above that the use of this material can bring about some unhappy results too. Suppose you operate a Garden Market or maybe you have B & B plants heeled in a frame for cash and carry. Suppose when you first put them in the frame you give the heeling material, the plant foliage, as well as the balls of earth an application of Aqua-Gro. You will have less foliage scorch on deciduous stock as well as on evergreens. Later applied waterings without the "wetting agent" will do more good, simply because the balls of earth will accept at once every drop of water that strikes them. Your plants in the heeling frame require fewer waterings and still have fine appearance. But suppose a customer plants some of these treated plants in heavy untreated soil. You have the same situation here as was described above in the case of the potted liners being transferred to the field; — a great difference in soil and moisture tensions. So your customers might come up with some serious plant losses.

We understand that Aquatrols now offer a small tube of Aqua-Gro which costs little and which may well be given with plants or sold, as you elect. That could be good and cheap insurance.

Likewise, if you do landscape work, and accumulate balled plants from a number of sources, (you probably have some kind of replacement policy for plants which do not live) the use of "wetting agents" could prevent many losses, and thus give you considerably more profit. You understand, of course that the application should be made to the plants and soil after they have been planted in permanent locations.

We have used, and will continue to use Aqua-Gro only in an experimental way, but as we learn more about it, we must tell you that it just could greatly reduce losses in transplanting of either or both, liners and B & B stock. We would not use it on liners here because, unless you watered the plants in with it, the material could actually be the cause of loss of the plants you buy from us. But if you plant banded or potted liners from us, or for that matter, from anyone else, or even of your own growing, we assure you that you will grow much higher percentages if you apply a "wetting agent" after you have the plants in the bed or field.

In passing, let us say that we could probably write another book or two like this about "wetting agents" but we think you have "had it", so we bring this message to an abrupt halt with the suggestion, "try it". We promise you, you can't lose a thing, even money.





Banded Shrubs and Evergreens

For 1960 Shipment

2" BANDS EXCEPT AS NOTED

Shipments will begin about May 1st to 10th.
See "Our Truck Delivery Service" pages 36 to 38.

RATES: Prices are "per 100"; 50 or more 2" banded plants at the 100 rate; 24 (a flatfull) or more 3" banded plants at the 100 rate; 300 or more of a single variety at 5% off prices quoted; 1000 or more of a single variety at 10% off prices quoted. Minimum orders, 50 2", or 24 3" banded plants of a variety.

[Please Note: In the descriptive information, first is given the horticultural name, next the common name and ultimate growth (height) of the variety. Next the pH (sweetness or sourness) of soil preferred by the variety.]

ABELIA grandiflora (Glossy Abelia. 4 to 5') pH 6.0 to 7.5.
An excellent shrub which will grow in most soils. $\frac{3}{4}$ " blooms in clusters from midsummer to frost. Hardy in most of Pennsylvania, Ohio and along coast to Boston. 10.00

ACER ginnala (Amur Maple) (3" pots. See Page 35.)

ALBIZZIA julibrissin (Mimosa. 20 to 25') pH 6.0 to 7.5.
A large highly ornamental shrub or small tree with small leaves. Pink blooms in great profusion from June to August. We have always thought of this as a strictly southern plant, but some 20 or 30 trees in Waynesboro about 8 to 10 ft. tall went thru the '58-59 winter undamaged. Our plants are grown from these trees which are apparently a hardier than average strain. ----- 15.00

ARONIA melanocarpa (Black Chokeberry. $1\frac{1}{2}$ to 3') pH 5.0 to 6.0. Very hardy little shrub with white flowers, black berries in fall and red fall coloring. Prefers loose, somewhat sour soil. ----- 10.00

AZALEAS (See Pages 31 to 34.)

BERBERIS juliana (Wintergreen Barberry 5') pH 6.0 to 7.5. Evergreen. Very thorny leaves and thorny twigs of dense habit. In great demand as a foundation shrub. Small yellow blooms in May followed by black berries in fall. ----- 15.00

BERBERIS juliana nana (Dwarf Wintergreen Barberry. $3\frac{1}{2}$ ') pH 6.0 to 7.5. A smaller type of the Wintergreen Barberry; especially desirable for low type homes. ----- 15.00

BERBERIS mentorensis (Mentor Barberry. 5') pH 6.0 to 7.5. Upright type with dark green foliage and excellent fall color. Very drought resistant. Dark red berries. -- 12.00

BERBERIS thunbergi atropurpurea (Red-leaf Japanese Barberry. 5') pH 6.0 to 7.5. These plants are certified true, and this variety is not the Barberry which carries wheat smut spores over winter. Excellent as a hedge or for specimen planting against any but red painted buildings. Bright red berries. ----- 6.50

BERBERIS verruculosa (Warty Barberry. $3\frac{1}{2}$ ') pH 6.0 to 7.5. Neat compact evergreen Barberry with lustrous green leaves, white beneath, making a fine contrast. Leaves spiny and twigs thorny. Golden yellow flowers in late May followed by violet-black berries in fall. ---- 15.00



- BIOTA aurea nana** (*Thuja orientalis*. Beckmann's Golden Arborvitae. 5') pH 6.0 to 7.5. Bright golden yellow foliage; compact, conical growth. Limited quantity. --- 17.50
- BUXUS microphylla compacta Kingsville** (1') pH 6.0 to 7.5. Originated by Henry Hohman nurseries of Kingsville, Md. A very dwarf compact plant, much hardier than American Boxwood (*Buxus sempervirens*) and very fine for low hedge or border. Because it is so very slow growing, the one year plants are small, but they are rugged and thrifty. ----- 12.50
- BUXUS microphylla koreana** (Korean Boxwood. 4') pH 6.0 to 8.0. Hardest of the known forms of Boxwood. Will grow in partially acid or sweet soils but prefers mulch in summer. ----- 12.50
- BUXUS sempervirens** (American Boxwood. 12') pH 6.0 to 7.5. Likes good soil well drained. The American Boxwood is hardy over a much greater area than the English. This variety grows satisfactorily throughout the southeastern quarter of Pennsylvania and along the coastal states to Boston. Evergreen with leaves about $1\frac{1}{4}$ " long. Not difficult to grow. ----- 12.50
- BUXUS sempervirens Welleri** (Weller's Hardier American Boxwood. 8 to 10') pH 6.0 to 7.5. Introduced by Weller Nurseries of Holland, Michigan where it seems to grow satisfactorily. Quite hardy and probably can be grown throughout most of the state of Penna. and other states of similar climate. Probably not quite as large growing as the common American Boxwood. ----- 12.50
- BUXUS suffruticosa** (Old English Boxwood. 3') pH 6.0 to 7.5. This is the true dwarf Old English type. Not as hardy as the American and some winters suffers foliage burn here at Waynesboro. Seems satisfactory along the coastal areas, Eastern Maryland and south. Very fine and very beautiful if it is hardy with you. ----- 13.50
- CALLICARPA japonica** (Japanese Beautyberry. $4\frac{1}{2}$ ') pH 6.0 to 7.5. Inconspicuous pinkish flowers in early July followed by $3/16$ " purple berries in fall. Prune heavily in winter to force new growth and thus profuse fruiting. 9.00
- CALLICARPA purpurea** (Chinese Beautyberry. 4') pH 6.0 to 7.5. Planted especially for its early fall purple berries. Blooms are insignificant, but because of great number of berries early in fall it is quite desirable. Easy shrub to grow, and good container item. Summer delivery only. 8.00
- CALYCANTHUS floridus** (Strawberry Shrub or Sweetshrub. 5') pH 6.0 to 7.5. Large glossy leaves. Does well in almost any soil. Fragrant, dark maroon flowers in June. Dried flowers were used by your grandmother for sachet. ----- 8.00
- CARYOPTERIS Blue Mist** (Hardy Bluebeard. 4') pH 6.0 to 7.5. Lavendar blue flowers August to frost. Sometimes called Blue Spirea. ----- 9.00
- CERCIS canadensis** (American Redbud. 25') pH 6.0 to 7.5. This is the native American Redbud or Judastree. A very ornamental small tree or large shrub which blooms in our mountains very early in the spring. Difficult to transplant after 3 to 4', and thus is best grown in a container. ----- 10.00
- CERCIS chinensis** (Chinese Judastree. 12') pH 6.0 to 7.5. Deeper pink than the American Judastree, and more compact. Blooms more heavily than our native American form. ----- 10.00
- CORNUS mas** (Cornelian Cherry. 20') pH 6.0 to 7.5. Vigorous sturdy shrub, narrow and dense. Small yellow flowers in April. Shiny edible scarlet fruits in fall. Does well in sun or part shade. ----- 8.00
- COTINUS coggygria - Rhus cotinus** (Smokebush or Purple Fringe. 12') pH 5.5 to 7.5. Pinkish or purplish panicles in great profusion give the plant the appearance of being covered with smoke. The blooms turn gray to brown, and gray fruits follow. Fall color yellow to orange. Will withstand dry situations and poor soil. -- 10.00



- COTINUS coggygria**—Red leaved (Red leaved Smokebush)
pH 5.5 to 7.5. These are excellent red leaved plants from seeds. They have been "rogued" many times to remove any green leaved or poorly colored plants. At this price they are definitely a bargain. Limited quantity. ----- 25.00
- COTONEASTER buxifolia** (Boxleaf Cotoneaster. 4') pH 6.0 to 7.5. Somewhat loose growing, but very attractive because of small shiny leaves and red berries in fall. Hardy in same area as English Boxwood. ----- 12.50
- COTONEASTER decora** (Necklace Cotoneaster. 4') pH 6.0 to 7.5. Soft grayish-green small leaves with berries setting along stem singly, which is reason for name "Necklace Cotoneaster". ----- 15.00
- COTONEASTER divaricata** (Spreading Cotoneaster. 6') pH 6.0 to 7.5. Arching, spreading plant covered with red berries, and with foliage turning red in fall. One of the best of the Cotoneasters. ----- 12.50
- COTONEASTER franchetti** (Franchet Cotoneaster. 10') pH 6.0 to 7.5. 1½" leaves; semi-evergreen with orange-red berries in fall. Makes up more quickly than many varieties. ----- 15.00
- COTONEASTER horizontalis** (Rockspray Cotoneaster. 3') pH 6.0 to 7.5. One of the most popular of the Cotoneasters. Flat horizontal branches with bright red berries in early fall. ----- 15.00
(3" pots. See Page 35.)
- COTONEASTER salicifolia** (Willowleaf Cotoneaster. 10') pH 6.0 to 7.5. Graceful arching shrub with narrow pointed willow-like leaves. One of the hardiest of the Cotoneasters. Red berries in late fall with foliage turning to purplish red. ----- 15.00
- CRATAEGUS phaenopyrum cordata** (Washington Hawthorne. 12 to 15') pH 6.0 to 7.5. Can be pruned to a single stem to make highly ornamental tree, or shaped into shrub form for either specimens or border plants. Thorny, with glossy foliage, and long lasting scarlet fruit. ----- 12.00
- DEUTZIA gracilis** (Slender Deutzia. 3') pH 6.0 to 7.5. Dense, compact, slender arching branches with myriads of white flowers in racemes late May and June. ----- 10.00
- DEUTZIA gracilis rosea** or **rosea eximea** (Rosepanicle Deutzia. 5') pH 6.0 to 7.5. This is a pink counterpart of *Deutzia gracilis*. Flower clusters are larger and this variety grows slightly taller than *D. gracilis*. Quite desirable. ----- 10.00
- DEUTZIA lemoinei** (Lemoine Deutzia. 5') pH 6.0 to 7.5. One of the hardiest of the Deutzias with flowers in upright racemes in late May. ----- 10.00
- ERICA darleyensis** (Darley Heath. 2') pH 5.0 to 7.0. Ericaceous plant, but not as insistant upon low pH as many others. This variety will survive under quite poor growing conditions. Blooms pale lilac in very early spring, sometimes through the winter. ----- 10.00
- EUONYMUS alatus** (Winged Spindletree or Burningbush. 8') pH 6.0 to 7.5. Corky barked twigs with long narrow leaves which turn bright scarlet in fall. ----- 12.50
- EUONYMUS alatus compactum** (Dwarf Winged Spindletree or Dwarf Burningbush. 4') pH 6.0 to 7.5. A more desirable shrub than the *E. alatus* because of its lower and more compact habit. Magnificent bright red fall color. ----- 12.50
- EUONYMUS europaeus Aldenhamensis** (New improved Burningbush. 15') pH 5.5 to 7.5. Foliage held late in fall and turns to brilliant scarlet. Fruit pink and orange. Vigorous, shapely plant. ----- 12.50
- EUONYMUS fortunei acutus** (Wintercreeper. 6") pH 5.5 to 7.5. Very low growing evergreen creeper. Seldom over 6" high. Small deep green foliage with slight reddish tint in winter. Can be trained as a vine, but best as a ground cover. Excellent plant. Quite hardy. 11.00



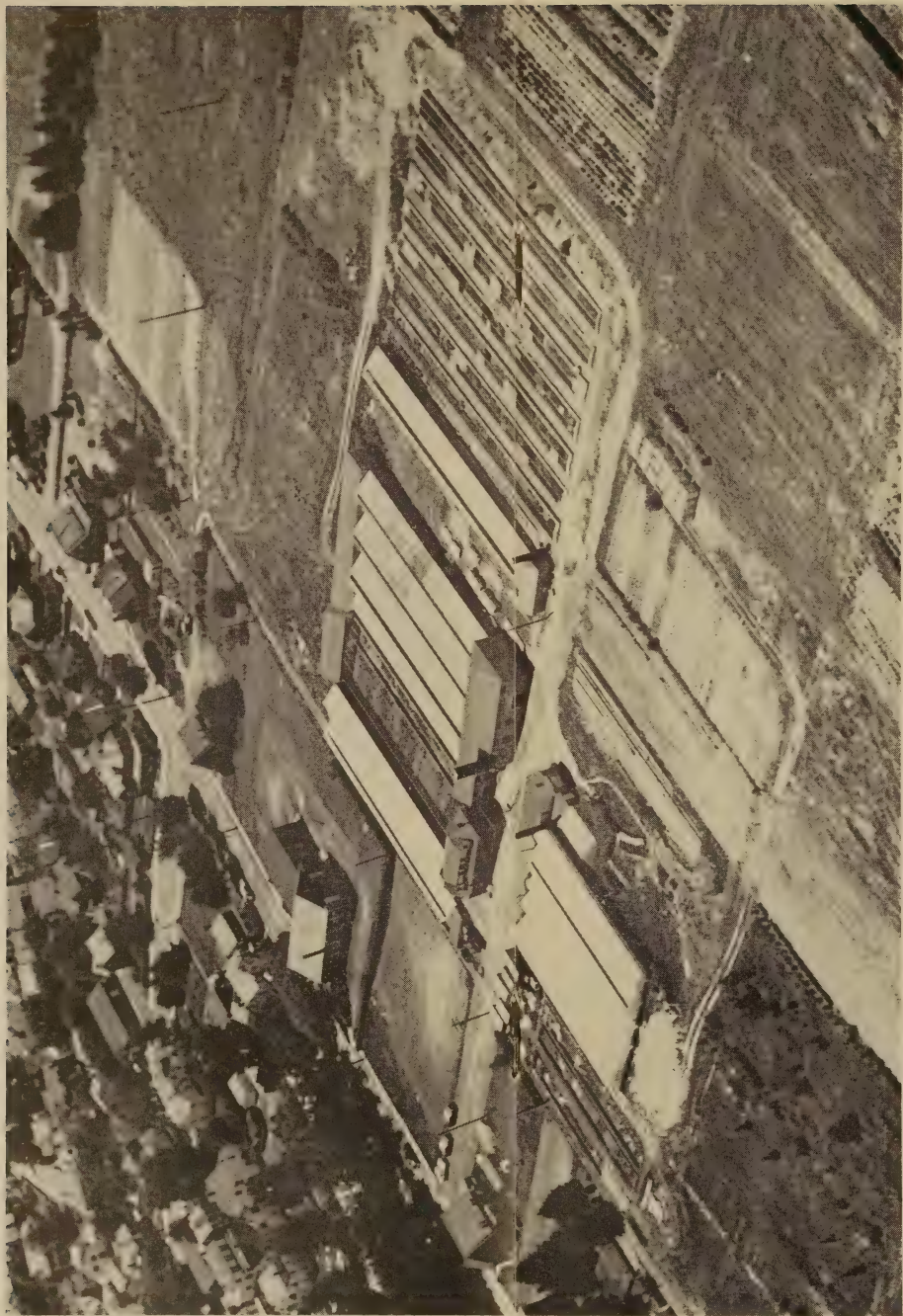
- EUONYMUS fortunei erecta** (Upright Wintercreeper. 3') pH 5.5 to 7.5. Dense, bushy with small glossy leaves. Shrublike plant of evergreen form. ----- 11.00
- EUONYMUS latifolius** (Broadleaf Euonymus. 20') pH 5.5 to 7.5. Large leaves, vigorous, and larger fruits than *E. europaeus*. Fruits orange in fall with leaves 3-5" reddish beneath, turning red in fall. ----- 11.00
- EUONYMUS patens** or **Kiautschovica** (Spreading Euonymus. 9') pH 6.0 to 8.0. Evergreen with glossy leaves. Pinkish capsules in spring followed by orange berries in late fall. ----- 11.00
- EUONYMUS vegetus** (Largeleaf Wintercreeper. 4') pH 5.5 to 7.5. Leaves 1 to 1½" thick and leathery. Sometimes called Evergreen Bittersweet. Abundance of fruit in fall. ----- 11.00
- EUONYMUS vegetus erectum**, **Saracoxie** (Upright Euonymus radicans. 5 to 6') pH 5.5 to 7.5. Introduced by Wild Brothers Nurseries of Saracoxie, Missouri. Described as compact and definitely upright; tolerant of hot, dry summers. Will grow in sun or shade. Thick glossy leaves which sometimes drop in extreme cold. However wood is winter hardy over practically all of the United States. ----- 11.00
- EUONYMUS yedoensis** (Yeddo Euonymus. 10') pH 5.5 to 7.5. Upright—spreading flat topped shrub. Plant in sun or part shade. Brilliant red fall coloring. Fruits pinkish lavender and orange. ----- 12.50
- EXOCHORDA giraldi wilsoni** (Wilson's Pearlbush) (3" pots. See Page 35.) -----
- FORSYTHIA Arnolds Dwarf** (2') pH 6.0 to 7.5. New extremely dwarf of weeping form. ----- 9.00
- FORSYTHIA Arnolds Giant** (12 to 15') pH 6.0 to 7.5. Another new Arnolds Forsythia. Very large growing with larger than average flowers. ----- 9.00
- FORSYTHIA Lynwood Gold** (5 to 7') pH 6.0 to 7.5. Comparatively new and outstanding. Excellent deep green foliage, erect branches, completely covered with deep yellow flowers. ----- 9.00
- FORSYTHIA Mrs. Farrand** (?) pH 6.0 to 7.5. New Arnold Arboretum introduction, with especially large flowers. ----- 12.00
- FORSYTHIA Spring Glory** (6 to 8') pH 6.0 to 7.5. Extremely heavy flower producer. Large pale yellow blooms in profusion. ----- 9.00
- FORSYTHIA suspensa sieboldi** (Siebold's Weeping Forsythia. 4') pH 6.0 to 7.5. A trailing or weeping form which is excellent for planting on overhanging walls or terraces. Branches touch the ground and root and thus hold the soil in place. Bright yellow blooms in mid April. ----- 9.00
- FRANKLINIA alataamaha** (Gordonia or Franklinia) (3" pots. See Page 35.) -----
- HYDRANGEA Nikko Blue** (3') pH 6.0 to 7.5. One of the hardier forms of the "French Hydrangeas". Blooms on new wood which makes it much preferred to the older forms. Addition of acid will make blooms deeper blue, and addition of lime will cause blooms to have pinkish cast. ----- 9.00
- HYDRANGEA quercifolia** (Oakleaved Hydrangea. 6') pH 6.0 to 8.0. 4 to 8" panicles of small flowers in mid-July. Planted in north principally for its interesting foliage. The leaves are similar to Red Oak in shape and turn reddish in fall. ----- 12.00
- HYPERICUM Hidcote** (New Dwarf Hypericum 2') pH 6.5 to 8.0. Hardier form of Hypericum of very low growth. Large waxy golden yellow flowers practically all summer. Note that it prefers sweet soils. ----- 11.00



- HYPERICUM prolificum** (Shrubby St. Johnswort. 3') pH 6.5 to 8.0. $\frac{3}{4}$ " bright yellow flowers in mid July to mid August. Very hardy, shrubby plant with small narrow leaves covered almost completely with flowers at blooming time. ----- 11.00
- ILEX aquifolium** (English Holly. 30') pH 5.5 to 7.0. Unnamed varieties, but all female clons selected for exceptional berry bearing quality and all for hardiness. Both male and female unnamed varieties at ----- 35.00
- ILEX aquifolium named** (English Holly) pH 5.5 to 7.0. Following is a list of named English Hollies, some of which are in small quantities and others in ample supply. They grow to various heights according to variety. Female forms are berry-bearing, but all must have male pollinators. ----- 45.00
- fructu-luteo.** Nice English type foliage but berries yellow instead of red.
- Mascula.** Male form needed for pollination of females. These are unnamed and are offered in unnamed list above at \$35.00 per hundred.
- pyramidalis femina** (Ciliata). Attractive purplish-bark with long spines and red berries.
- recurva mascula.** A male form of more dense and more dwarfish habit than most. Bark greenish-purple with leaves inclined to be crinkled or twisted.
- Van Tol (Jan van Tol).** Smooth, glossy leaves, somewhat convex. Bears early with large dark red shiny fruits.
- ILEX aquipernyi** (3') pH 5.5 to 7.0. A hybrid of English Holly x pernyi. Hardy in Philadelphia and along coastal cities, but worthy of trial in many areas. Very dwarfish, stubby growth with excellent foliage and bright red berries. We offer male and female forms. Female minimum 50 plants and male minimum 25 plants. ----- 35.00
- ILEX cornuta burfordi** (Buford's Chinese Holly. 9') pH 5.5 to 7.0. Extra large bright red berries through fall and winter. Leaves are very thick and leathery and more lustrous than many of the other Hollies. This variety does not need a pollinator to produce berries, but of course without a pollinator, berries will not contain seeds. Hardy in southern Connecticut and on Long Island. Hardy here in Waynesboro. ----- 25.00
- ILEX crenata convexa** (Japanese Convexleaf Holly. 8') pH 5.5 to 7.0. A very desirable compact hardy evergreen shrub. Usually twice as broad as high. Leaves are convex, and exceptionally fine green. Black berries. No spines. ----- 15.00
- ILEX crenata Green Island** — Plant Pt'd. 817. pH 5.5 to 7.0. Grows more low and spreading than most I. convexa forms. Dense, horizontal rather than upright. Makes up quickly and is very handsome plant. One of the finest for modern low-eaved houses. ----- 35.00
- ILEX crenata helleri** (30") pH 5.5 to 7.0. Very dwarf form. Leaves are very small and branches twiggy but thornless. Probably not as hardy as I. convexa, but does very well in our area. ----- 15.00
- ILEX crenata hetzi** (4') pH 5.5 to 7.0. Larger leaves than most of the I. crenata, Dwarfish, compact and very pleasing variety. Black berries. ----- 15.00
- ILEX crenata latifolia** (Bigleaf Japanese Holly. 8') pH 5.5 to 7.0. A dense pyramidal form which may be trimmed in formal shape. Is said to be even more hardy than most crenatas. ----- 15.00
- ILEX crenata rotundifolia** (Roundleaf Japanese Holly. 6') pH 5.5 to 7.0. Globe shaped form with rounded leaves. Grows dense and compact, and is probably one of the most popular of the I. crenata. Black berries. ----- 15.00



- ILEX crenata Stokes Dwarf** (Stokes Holly. 18") pH 5.5 to 7.0. Plant patent number 887; this is a new very dwarf variety of extreme hardiness. Unlike many of the dwarf crenata types, the foliage is not straggely, but the plant forms a nice compact specimen. Grows slowly, but we predict it will be in wonderful demand as soon as the stock can be built up in the nurseries. ----- 20.00
- ILEX crenata uprite** (Upright Japanese Holly. 8') pH 5.5 to 7.0. Grows larger and bulkier than most of the crenatas, and has very dark green foliage. Extremely hardy. ----- 15.00
- ILEX opaca** (American Holly. 40') pH 5.0 to 7.0. Unnamed forms but sexes are indicated, and all are from selected northern trees to give us hardier clons. Order male (no berries) or female (berry-bearing). To assure best berry-bearing at least one male should be planted with each three females. ----- 25.00
- ILEX opaca named** (American Holly) pH 5.0 to 7.0. In the following list of named varieties some are in comparatively small quantities but others are in ample supply. The female Hollies are the berry-bearing form and the male forms provide the needed pollen for the female to produce berries. All male forms can be had in 1/2 flats (25 plants) without extra charge. All female forms are 50 to flat in minimum quantity. Both Ilex opaca and I. aquifolium should have protection from extreme north and west winter winds until at least their fourth year. Protection from rabbits and deer is also important. Price of all varieties listed below. ----- 35.00
- Ardens.** Heavy annual bearer with bright fruits of good size.
- Christmas Spray.** Rapid growing female with large dark green leaves and good sized red berries on long stems. Prune somewhat heavily while young to prevent legginess.
- Clark.** Compact with bright red berries on somewhat stubby branches.
- Cumberland.** A prolific fruit producer of light red berries. Leaves, very dark green of unusually high gloss. Considered glossiest-leaved American holly of today.
- Howard.** Vigorous growing female of dense columnar habit. Bright shining medium sized berries and dark glossy green leaves. Not hardy here, but satisfactory south of Mason & Dixon line.
- Leatherleaf.** A male form with quite large leaf, and as the name indicates, the leaves are thick and leathery.
- Maurice River.** Vigorous female with red berries, glossy-green foliage and upright habit. Bears young.
- Menantico.** Fast growing female setting numerous fruits at young age. Deep green foliage with prominent spines.
- Merry Christmas.** This variety appeals to us as one of the more desirable. Good green foliage and a dependable bearing habit. Originated at Boyce Thompson Institute, Yonkers, N. Y.
- Merry Christmas Convex.** A crinkly leaved form of the above, with very interesting foliage and fine red berries. Another very desirable form.
- Miss Helen.** Large egg-shaped scarlet berries in abundance. Bears young. Dense dark green foliage on coned shaped type of plant.
- Needlepoint.** As the name indicates, spines are sharp and long. Excellent red berry-bearing type.
- Norfolk.** Originated near Norfolk, Va., but hardy here. Heavy berry producer. Good foliage. Spreading type.



Appalachian Nurseries
Waynesboro, Pennsylvania



Parkton. We have no official description on this variety, but young trees are vigorous, upright and heavy bearing.

Richards. Erect growing, broad leaves, quite flat, with large berry clusters. Originated in southern Maryland and recommended for southern planting, but trees do well here, and therefore probably will be satisfactory over all of zone 5 or 10 degrees below zero.

Salem Compact. Slow growing, dwarf female type of narrow pyramidal habit. Short thick leathery leaves, and a very desirable clone for planting in small or restricted areas.

Subintegra. This form probably should be listed as a sub-species type, because we question if it belongs with the opaca forms. The leaves have no spines but are smooth and leathery. It develops into a large shrub or small tree rarely over 12' tall. Large deep red fruits. Hardy to Boston. We offer these in both male (non berry-bearing) and female (berry-bearing). State which you wish.

Of the above varieties offered, we have *Ardens*, *Merry Christmas*, *Merry Christmas Convex*, *Needlepoint*, *Norfolk*, *Salem Compact* and unnamed *mascula* in comparatively large quantities. All others are limited in quantity.

ILEX pedunculosa (Longstalk Holly. 12-15') pH 5.5 to 7.0. Evergreen shrub or small tree with smooth leathery leaves and no spines. Large red berries on the female form. Hardy to Boston. We have both male and female forms. ----- 25.00

ILEX pernyi (Perny Holly. 15') pH 5.5 to 7.0. Very stubby and shrubby growth with sharp spines and bright red berries in fall. Slow growing and most unusual. Hardy here, but north of Harrisburg may suffer some winter damage unless in protected spots. -- 25.00

JASMINUM nudiflorum (Winter Jasmine. 3') pH 5.5 to 7.0. A low shrub with arching branches. Stems are dark green all year, and foliage is almost evergreen here. Forsythia like flowers in very early spring. Especially desirable over rock walls, terraces, etc. ----- 11.00

JUNIPERUS chin. glauca Nelsons (Nelson's Blue Juniper. 4') pH 5.5 to 7.0. Here is a new Juniper which probably has not been officially named, but which makes up very quickly into a nice compact spreading form, and is very attractive. It is definitely a *chin.* form, and of the general shape of the *J. pfitz. compacta*, although it grows more quickly and has a better color. This is a neater evergreen than *J. pfitz. glauca* and is of better color, and therefore is more than a substitute for the *J. pfitz. glauca*. 15.00

JUNIPERUS chin. pfitzeriana (Pfitzer's Juniper. 8') pH 5.5 to 7.0. Broad and spreading and makes up quite fast. One of our most common and widely planted evergreens. 15.00

JUNIPERUS chin. pfitzeriana compacta (Compact Pfitzer's Juniper, 4½') pH 5.5 to 7.0. Compact form of Pfitzer's Juniper; doesn't grow quite so clumsy and large as common Pfitzers. Most nurserymen who grow this consider this a much better evergreen than *J. pfitzeriana*. 15.00

JUNIPERUS chin. pfitzeriana glauca (Blue Pfitzer's Juniper. 8') pH 5.5 to 7.0. A form of Pfitzer's Juniper which has bluish cast. Limited supply. ----- 15.00

JUNIPERUS chin. pfitzeriana nana (Dwarf Pfitzer's Juniper. 3½') pH 5.5 to 7.0. Very dwarf form of Pfitzer's Juniper with darker green foliage. Limited quantity. ----- 17.50

JUNIPERUS chin. sargentii (Sargent's Juniper) pH 5.5 to 7.0. Very low growing prostrate form with steel blue evergreen foliage and blue berries in fall. ----- 15.00



- JUNIPERUS communis compacta aurea** (Compact Golden Horizontal Juniper. 10') pH 5.5 to 7.0. Spreading plant with gold flecked foliage. Makes up quickly. Purplish winter color. ----- 15.00
- JUNIPERUS communis depressa plumosa** (or *Horizontalis Plumosa* — Andorra Juniper. 2') pH 5.5 to 7.0. Bright green foliage which turns purple in fall. Some nurserymen dislike it because of its winter color, but it makes up fast and probably is the most profitable of the spreading evergreens. ----- 12.50
- JUNIPERUS excelsa stricta** (Spiny Greek Juniper. 10') pH 5.5 to 7.0. Gray-green foliage. Broad based pyramidal evergreen. Good Garden Shop item. ----- 18.00
- JUNIPERUS glauca hetzi** (Hetz Blue Juniper. 7') pH 5.5 to 7.0. A fast growing blue-green spreading Juniper. Grows more upright than Pfitzers and makes up quickly. Very popular item. ----- 15.00
- KOLKWITZIA amabilis** (Beautybush. 7') pH 6.0 to 7.5. Upright arching branches completely covered with tubular pink flowers in June. Oftentimes again in the fall some bloom will show. Reddish fall foliage. ----- 12.50
- LEUCOTHOE catesbaei** (Drooping Leucothoe. 4') pH 4.5 to 6.0. Sometimes mistakenly called *Andromeda*. Ericaceous type of plant. Likes partial shade. White flowers in May. Glossy leathery foliage with rich fall coloring. ----- 15.00
- LIGUSTRUM ibota regelianum** (Regal Privet. 5') pH 6.0 to 7.5. Very hardy, horizontal branching and very neat appearing. Desirable. ----- 9.00
- LIGUSTRUM ibota vicary** (Golden Ibota Privet. 5') pH 6.0 to 7.5. Foliage golden yellow all season. Neat compact shrub. Very popular as a "canned" item. ----- 9.00
- LIGUSTRUM lucidum** (Glossy Privet. 15') pH 6.0 to 7.5. Thick leathery leaves. Evergreen shrub of fine quality. Clons are of variable hardiness. Our stock is from northern Delaware. ----- 11.00
- LIGUSTRUM lucidum Pillar** — Plant Pt'd. 1664. (Glossy Privet. ?) pH 6.0 to 7.5. A new and hardy form of "lucidum" introduced by us last year. It has withstood temperature to zero, and promises to be one of the really desirable new types. We believe it will be satisfactory over most of zone 5 which means temperature to about 10 below zero. ----- 16.00
- LIGUSTRUM lucidum recurvifolium** (Crinkly leaved Glossy Privet. 20') Attractive thick glossy evergreen leaves. Hardy to Philadelphia along coast. Blooms are white but insignificant. Attractive blue-black berries. ----- 11.00
- LIGUSTRUM lucidum Suwanee River**. (Plant Patent No. 1402) pH 6.0 to 7.5. A new and distinctive spreading form of "Lucidum" or "Wax Privet". Excellent deep green foliage. Plant grows lower and more spreading than the species. Excellent container item. Rated hardy along the east coast to and including Long Island. ----- 32.00
- LIGUSTRUM ov. aureum** (Golden California Privet. 10') pH 6.0 to 7.5. Actually a variegated golden leaved form of the California Privet. Instead of being uniformly golden as *L. ibota vicary* the foliage is blotched with golden variegation. Hardy in Waynesboro, but may freeze to ground north of Harrisburg in extremely bad winters. ----- 8.00
- LONICERA compacta nana** (Clavey's Compact Dwarf Honeysuckle. 3') pH 6.0 to 7.5. A new hardy dwarf honeysuckle recently introduced. Small yellow flowers in May. Red berries. Nice neat plant. ----- 9.00
- MAHONIA aquifolia** (Oregon Hollygrape. 4') pH 6.0 to 7.5. Lustrous dark green leathery leaves. Pyramidal spikes of bright yellow flowers, followed by grapelike fruits in early summer. Thrives under adverse conditions. Easily grown. Can be shaped or kept low. Holly-like leaves cause it often to be mistaken for a form of holly. ----- 13.50



- MYRICA pensylvanica** (Northern Bayberry. 5') pH 5.0 to 6.5. Deciduous shrub with fragrant semi-evergreen leaves. Hardy from Newfoundland to Maryland along seashore. Does well in well drained soil, even if soil is very poor. We are growing it in domestic peats. The gray berries of the shrub were used by the Colonists in candlemaking for incense-like fragrance. ----- 13.50
- OSMANTHUS ilicifolius** (aquifolium) (Holly Osmanthus. 12') pH 5.5 to 7.0. Handsome holly-like evergreen with spiny dark green leaves. Excellent ornamental plant which does well in sun or partial shade. Fragrant yellow green flowers in July and bluish black berries in fall. ----- 12.50
- PHILADELPHUS albatre** (Lemoine's Mockorange Albatre. 5') pH 6.0 to 7.5. Double flowering very desirable form Compact grower and if anything preferred to *P. virginalis*. ----- 10.00
- PHILADELPHUS corn. aureus** (Golden Mockorange. 4') pH 6.0 to 8.0. Dwarfish form with bright golden color. One of the most popular of golden leaved shrubs. We are booked up on this variety for the time being, but we invite your order for later delivery. We are in position to supply large quantities on later delivery schedules. -- 12.50
- PHILADELPHUS Enchantment** (Lemoine's Mockorange Enchantment. 6 to 7') pH 6.0 to 8.0. Double white flowers in thick panicles, somewhat similar to Bouquet Blanc. ----- 12.50
- PHILADELPHUS Lemoinei Glacier** (Lemoine's Mockorange Glacier. 5') pH 6.0 to 8.0. Flowers are double 1 3/4". ----- 12.50
- PHILADELPHUS virginalis** (Virginal Mockorange. 5 to 8') pH 6.0 to 8.0. Single and double flowers up to 2" in diameter in mid-June. Very fragrant. ----- 10.00
- PHYSOCARPUS opulifolius aurea** (Golden Ninebark. 9') pH 6.0 to 7.5. Extremely hardy shrub which does well in almost any soil. Flowers are small, white and in clusters. Fruits are attractive reddish color turning brown and remain on the plant throughout the winter. Should be planted in full sun for best color. ----- 9.00
- PIERIS japonica** (Japanese Andromeda. 5') pH 5.0 to 6.0. White flowering broadleaved evergreen. Blooms May. One of the easier ericaceous plants to grow, but must have reasonable drainage. One of our biggest sellers. -- 15.00
- PRUNUS laurocerasus schipkaensis** (Cherry-laurel. 12') pH 6.0 to 7.5. Leathery, shiny evergreen leaves. Grows rapidly and excellent for large buildings or as a screen on the smaller property. A most serviceable shrub. ---- 17.50
- PRUNUS laurocerasus zabeliana** (Zabel Cherrylaurel. 12') pH 6.0 to 7.5. A form of Cherrylaurel, hardy over most of Penna., Ohio, much of New York and to Boston. Thrifty grower with dark shiny evergreen leaves. Very popular. ----- 17.50
- PYRACANTHA cocc. lalandi** (Laland's Firethorn. 8') pH 6.0 to 7.5. Semi-evergreen here. In protected spots foliage remains all winter. Planted for its great profusion of orange berries in clusters in fall and winter. Probably the hardiest of the *P. coccinea* group. Should be grown in containers because roots range over wide area, making it difficult to transplant. Makes up fast. One of the finest money-makers for both nurseries and Garden Shops. ----- 12.50
(3" pots. See Page 35.)
- PYRACANTHA cocc. pauciflora** (5') pH 6.0 to 7.5. Low dense habit and very thorny with yellowish-red fruit. Hardy and well suited for hedges or specimens. ----- 12.50
- PYRACANTHA crenulata rogersiana** (Rogers Firethorn. 9') pH 6.0 to 7.5. Small leaves as compared to *P. lalandi*. Berries are deep orange-red in large number in fall and winter. Possibly not as hardy as *lalandi* but much in demand where it can be grown. Plant in containers. -- 12.50



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- PYRACANTHA crenato-serrata - yunnanensis** (Yunan Firethorn. 8') pH 6.0 to 7.5. A red berried form possibly not as hardy as the other variety listed, but does well here in Waynesboro. Another good container item. ---- 12.50
- RETINOSPORA obtusa crippei** (Golden Hinoki Cypress. 6') pH 5.5 to 6.5. Lemon yellow foliage; slow growing. Many Retinosporas are considered cheaper evergreens. but the obtusas definitely are first quality plants. ----- 22.50
- RETINOSPORA plumosa** (Plumed Falsecypress. 20') pH 6.0 to 7.0. Broad pyramid with lacy pale green foliage. One of the types which makes up quickly and is considered a low cost plant. Good Garden Market item. 12.50
- RETINOSPORA plumosa aurea** (Golden Plumed Falsecypress. 20') pH 6.0 to 7.0. A golden tipped form of the above with similar characteristics. ----- 12.50
- RETINOSPORA plumosa aurea Golddust or Lovetti** (Golddust Falsecypress. 12') pH 6.0 to 7.0. Quite attractive form of the R. plumosa. Not as fast growing, and more dwarfish and regular than most in this group. Excellent Garden Market item. ----- 12.50
- RETINOSPORA plumosa squarrosa veitchii.** (Veitch Blue Falsecypress. 20') pH 6.0 to 7.0. Pyramidal plant with medium spread at base. Lacy bluish foliage. Makes up quickly. Excellent Garden Market item. ----- 12.50
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RHODODENDRONS

These Rhododendrons are on their own roots. That means they are from rooted cuttings. They make up into salable plants more quickly than grafted Rhododendrons, and are healthier, stronger, and sturdier.

For centuries nurserymen have been grafting desirable varieties of Rhododendrons. The standard procedure has been to first grow seedlings of *Rhododendrons ponticum*. When the seedlings were large enough to graft, they were potted up and brought into the greenhouses. During the winter months, sprigs (or scions) of the desirable varieties were then grafted onto the *R. ponticum* roots.

Many times, by using large scions, the plants would have good appearance and were sold the following spring. That, of course, was unwise. Unless the receiving nurserymen understood that the grafts were only recently made, and the graft unions could not possibly be reasonably healed, he might not handle them carefully enough, and the graft unions would become damaged. The result would be that the plants would be certain to die during the hot summer.

Although you may give them the very best of care, graft unions of Rhododendrons never heal properly and well. Even after several years, strong winds, animals, or machinery may break off the whole top of a grafted Rhododendron. If not completely broken off, such mechanical damage may loosen the graft union. Then diseases and insects get in and the plant soon dies.

Rhododendrons on their own roots are not grafted, and thus have no graft union weaknesses. They make up faster into salable sizes of plants.



Some of the varieties offered in this list have been in plantbands for nearly a year. Others were rooted during the past winter. Some varieties make up much faster than others, so there is variation in the sizes of the plants. But all are heavily rooted, and fine first-class stock.

The Plants are in 4 x 4 x 4" plantbands with 12 to the flat. So you need order but 12 of a variety if you wish an assortment. Those marked with an asterisk (*) we have in quantity. A special discount of 5% is deducted on orders of 10 flats (120 plants) or more of any one variety so marked.

Some are in comparatively short supply, so order early.

All are in 4" plantbands; 12 plants to flat; please order in multiples of 12. Rates shown are 100 rates but apply to flatfuls of 12 plants. Note text above for special discounts on some varieties.

At \$60.00 per C.

CATAWBIENSE GRANDIFLORUM: One of the best for foliage. Rosy-purple flowers. Medium height.

RAMAPO: Small leaved, dense with a mass of orchid colored flowers.

* **ROSEUM ELEGANS:** Dense plant with mauve pink blooms in midseason. The best all around landscape plant. Easiest to grow. Medium height. Very hardy.

WINDBEAM: Excellent hardy foliage and plant habit. Multiple trusses of delicate pink smothering whole plant when in bloom. Semi-dwarf.

At \$75.00 per C.

ALBUM ELEGANS: Upright vigorous, white with slight lilac tint. Late blooming.

CATAWBIENSE BOURSAULT: Lilac, tinged rose. An excellent hardy variety. Midseason. Medium height.

CUNNINGHAM WHITE: Dense compact plant with white blooms early in season. Medium height.

ENGLISH ROSEUM: Midseason; rose, tinted lilac blooms.

IGNATIUS SARGENT: Large, individual light red flowers with paler throat; late; medium height.

PARSONS GLORIOSUM: Dark lilac-rose flowers and large dark green leaves; midseason. Medium height.

* **PURPUREUM GRANDIFLORUM:** Foliage dark green; purple flowers. Medium growing.

* **ROSEUM PINK:** A select form of R. Elegans, with same good plant habit; large trusses of clear pink flowers. Medium height. Very hardy.

At \$90.00 per C.

CARACTACUS: Late purplish crimson blooms on well growing plant of medium height.

CATAWBIENSE ALBUM: White selection from native R. catawbiense. Excellent habit of growth; dwarf and compact. Clear white. Large blooming.



At \$90.00 per C. (Continued)

CHARLES BEAUFORT: White fragrant flowers. Very hardy. Excellent foliage.

DR. DRESSELHUYS: Medium tall; upright grower; analine red flowers in tall trusses; late.

E. S. RAND: Distinctive foliage; crimson red flowers; mid-season; low growing.

EVERESTIANUM: Rosy-lilac fringed blooms; midseason; low growing.

* **LEES DARK PURPLE:** Large, deep purple trusses backed by dark wavy foliage; late. Medium height.

MME. CARVALHO: Large white flowers late in season. Medium tall. Limited supply.

MRS. C. S. SARGENT: Rosey red; medium height; very hardy.

At \$100.00 per C.

AMERICA: Red blooms on spreading plant; medium height. One of best. Midseason.

ATROSANGUINEA: Old favorite upright deep red with good foliage. Low growing.

BOULE DE NEIGE: Compact, low growing, early white.

CAROLINE: Large, fragrant pale orchid flowers. Early mid-season. Excellent foliage. Very hardy. Gable hybrid.

CONEWAGO: Gable hybrid. Delicate pink with slight bluish shading. Amaranth rose blooms in great profusion. Dwarf. Midseason. Hardy.

MAY DAY: A new (1932) introduction. Scarlet blooms on thick dark green leaves. Blooms midseason. Reported hardy and excellent grower.

NOVA ZEMBLA: Vigorous growing red with excellent foliage. Some growers report it as vigorous as Roseum Elegans, but it has not proved so with us.

PIONEER: Gable hybrid. Evergreen hybrid of mucronulatum. Very hardy and free flowering. New and excellent. Clear pink blooms in great profusion. Dwarf. Will stand full sun early.

SALIX purpurea nana (Purpleosier or Blue Asiatic Willow. 4') pH 6.0 to 7.5. One of the better dwarf willows. Excellent as a hedge or for planting in moist places as specimens. ----- 8.00

SPIRAEA Anthony Waterer (Dwarf Red Spirea. 3') pH 6.0 to 7.5. One of the most popular of the dwarf Spireas. Pleasing plant with profuse red flowers in late June. If old blooms are removed before they harden, blooming period can be greatly prolonged. Excellent item in general nursery as well as Garden Shops. ----- 9.00

SPIRAEA collosa alba. (Also *S. albiflora*. 1½') pH 6.0 to 7.5. Dense compact low shrub with profuse white flowers in flat clusters in July. Excellent when planted with the red flowering forms of Spirea. ----- 10.00

SPIRAEA margaritae (Margarita Spirea. 4') pH 6.0 to 7.5. One of the better Spireas with rosey pink flat clusters of bloom in June. Like most of the Spirea of this form it blooms best when trimmed back each season to 1'. Blooms are on new wood. ----- 10.00

SPIRAEA vanhouttei (Vanhoutte Spirea. 6') pH 6.0 to 7.5. Oftentimes called "Improved Bridalwreath". Profuse white flowers in clusters on graceful arching branches. Hardy and very widely planted. ----- 9.00



- SYRINGA josikaea** (Hungarian Lilac. 10 - 12') pH 6.0 to 7.5. An old fashioned lilac with glossy green foliage, hardy over most of U. S. Blooms violet in early June. Stands clipping well. Quite desirable. ----- 12.50
- SYRINGA villosa** (Lake Lilac. 8') pH 6.0 to 7.5. Dense upright grower with lilac to white blooms a week after most others have bloomed. One of the hardiest of the lilacs. ----- 10.00
- SYRINGA vulgaris** (Common Lilac. 12-20') pH 6.0 to 7.5. These are from seeds and bloom about 95% the fragrant lilac bloom you are accustomed to. Plants are vigorous and grow in almost any soil. ----- 12.50

Special Quantity Discount on Taxus

We have too many *Taxus* of most varieties. As a special inducement, if your order amounts to a total of 5000 *Taxus*, or more, take the following discounts; 10% on 300 or more of a variety; or 15% on 1000 or more of a variety. That means that a variety priced at \$13.50 per hundred in 1000 lots actually costs you less than 11½¢. This quantity discount applies only to *Taxus* and on orders totaling 5000 or more.

- TAXUS baccata adpressa stricta** (Shortleaf Upright English Yew. 4 to 5') pH 5.5 to 7.5. Compact upright small growing form with short needles. Slow growing and good. ----- 13.50
- TAXUS baccata dovastoni aurea-variegata** (Yellow Dovaston.) pH 5.5 to 7.5. A golden form which might be classified as something of a novelty. Quite a handsome plant, and may be used for color contrast with dark green forms. ----- 13.50
- TAXUS baccata repandens** (Spreading English Yew. 2') pH 5.5 to 7.5. Horizontal Yew with graceful arching branches. Rarely grows over 2' in height. Excellent dark green. Probably the hardiest of the English forms. ----- 16.00
- TAXUS canadensis**, (Canada Yew. 3-6') pH 5.5 to 7.5. One of the hardiest of all Yews. Withstands shade much better than other forms, but foliage is not as dark green as many. ----- 13.50
- TAXUS cuspidata spreading** (Japanese Spreading Yew. 6') pH 5.5 to 7.5. The most popular of all the spreading Yews. Eventually grows quite large for average foundations. Makes up comparatively fast so nurserymen like it well. ----- 13.50
- TAXUS cuspidata capitata** (Upright Japanese Yew. 15') pH 5.5 to 7.5. Like most of the cuspidata *Taxus*, this variety will eventually grow quite big. If kept trimmed to pyramid form, it is one of the most handsome of the Japanese forms. For average foundation plantings it can be kept within bounds for 20 years or more by yearly shearing. We grow them from both tip cuttings and seeds, so please specify which you prefer. ----- 16.00
- TAXUS cuspidata compacta-brevifolia** (Compact Japanese Yew. 5') pH 5.5 to 7.5. A more compact form of Japanese Yew which is more suitable for foundation planting on average low roofed homes. Slower to make up than *T. cuspidata*, but more desirable. ----- 13.50



TAXUS cuspidata densa (Dense Japanese Spreading Yew. 5') pH 5.5 to 7.5. Another compact form of Japanese Spreading Yew, with excellent color. -----	13.50
TAXUS cuspidata densiformis (Dense Yew. 6') pH 5.5 to 7.5. Dense compact spreading type. Grows more slowly than cuspidata with better color. -----	15.00
TAXUS cuspidata nana-brevifolia (Dwarf Japanese Yew. 4') pH 5.5 to 7.5. Slow growing, and yet one of the most desirable of all of the Japanese forms. Several similar types are offered as <i>T. cuspidata nana</i> , but are actually compact forms similar to these listed above. We offer the true slow growing dwarfish form. -----	13.50
TAXUS intermedia (Hybrid Yew. 6') pH 5.5 to 7.5. Spreading form of very good character. Not as bulky and large as <i>T. cuspidata</i> . -----	13.50
TAXUS media Adams Pyramidalis (Adams Upright Yew) pH 5.5 to 7.5. Slender, upright, rapid growing type. ----	15.00
TAXUS media browni (Brown's Yew. 6') pH 5.5 to 7.5. A broad upright form which has become extremely popular. Makes up somewhat fast and thus from a nurseryman's standpoint is desirable. Good fine dense deep green. -----	13.50
TAXUS media columnaris Mooni (Moons columnar Yew) pH 5.5 to 7.5. Broad columnar form of excellent hardiness with good foliage color. -----	13.50
TAXUS media hatfieldi upright (Hatfield's Pyramidal Yew. 8') pH 5.5 to 7.5. Of the many hybrids originally introduced by Hatfield, from a commercial standpoint, this upright form, and one of the best of the spreading types have been selected by nurserymen over the years. This is a broad columnar form with excellent foliage, good color, with dense upright branches. -----	13.50
TAXUS media hatfieldi spreading (Hatfield's Spreading Yew. 3') pH 5.5 to 7.5. A hybrid of English and Japanese Yews of spreading form with good color and dense foliage. -----	13.50
TAXUS media henryi (Henry Yew) pH 6.0 to 7.5. Comparatively new form which grows somewhat like <i>Taxus media hicksi</i> , but foliage seems more dense. Limited quantity. -----	13.50
TAXUS media hicksi (Hick's Columnar Yew. 10') pH 5.5 to 7.5. Similar to the Irish Yew (<i>T. baccata</i>) but much more hardy. Upright columnar and needs but little pruning; an excellent rich glossy green plant. -----	13.50
TAXUS media hunnewelli (Hunnewell's Spreading Yew. 6') pH 5.5 to 7.5. Spreading form of excellent foliage. Is inclined to more uniform growth than many of the spreading Yews. Gets somewhat large for low types of houses, but nurserymen like it because it makes up reasonably fast. -----	13.50
TAXUS media thayeri (Thayer Yew. 8') pH 5.5 to 7.5. A large broad Yew. Sometimes twice as broad as high with almost horizontal branches. Often pruned by nurserymen to broad, low conical shape. -----	13.50
TAXUS media vermeullen (Vermeullen Yew) pH 5.5 to 7.5. Pyramidal type with compact dense foliage. Broad base as compared to hicksi which it resembles. -----	13.50
TAXUS media wellesleyana (Wellesley's Yew. 8') pH 5.5 to 7.5. Broad based upright form with dark green foliage. Very satisfactory plant. -----	13.50
THUJA occ. elegantissima (Golden Tip Arborvitae. 15') pH 6.0 to 7.5. This is probably the best of the golden tipped Arborvitae. Uniformly broad pyramid with good dense foliage. One of the lower priced evergreens. ----	12.50
THUJA occ. globosa Little Gem. (Little Gem Arborvitae. 30") pH 6.0 to 7.5. A very dwarf and neat little form of globe arborvitae. Crinkly foliage and very neat appearance. -----	15.00



THUJA occ. globosa Nova. (Globe Arborvitae. 3') pH 6.0 to 7.5. Globe shaped bushy plant, so well known it hardly needs description. This is a new clon selected for its better color. -----	12.50
THUJA occ. globosa Woodwardi (Woodward's Globe Arborvitae. 4') pH 6.0 to 7.5. Usually a little broader than tall. Good color. We have a limited quantity. ----	12.50
THUJA occ. plicata (Giant Arborvitae) pH 6.0 to 7.5. Narrow pyramidal type which makes up quickly. Branches well to ground, and foliage is good and quite dense. Quick turnover item. -----	12.50
THUJA occ. pyramidalis (Pyramidal American Arborvitae. 25') pH 6.0 to 7.5. Well known uprite form. Universally popular. Stands shearing very well. -----	12.50
VIBURNUM burkwoodi (Burkwood Viburnum. 6') pH 6.0 to 7.5. Vigorous growing semievergreen with glossy dark green leaves. Fragrant flowers of blush-pink in mid-May. One of the better shrubs. -----	22.50
VIBURNUM carlesii (Koreanspice Viburnum. 4') pH 6.0 to 7.5. One of the very fragrant snowball types of Viburnum with black berries in early fall and reddish foliage in fall. These are own root plants. -----	15.00
VIBURNUM chenaulti (Chenault Viburnum. 6') pH 6.0 to 7.5. A new variety similar to V. burkwoodi, but somewhat lower growing, and more compact. -----	22.50
VIBURNUM dentatum (Arrow-wood. 12') pH 6.0 to 7.5. Very hardy and vigorous shrub which will grow well in almost any soil. Creamy white flowers in early June followed by blue berries in fall. Glossy red fall color. -----	10.00
VIBURNUM juddi (Judd Viburnum.) pH 6.0 to 7.5. New and outstanding origination of the Arnold Arboretum. Similar to V. carlesii, but not as large growing with darker leaves and larger flowers. -----	22.50
VIBURNUM opulus-americanum (Hibush Cranberry. 12') pH 6.0 to 7.5. Dense vigorous plant with white flowers and long lasting red berries. -----	9.00
VIBURNUM rhytidophylloides (Lantanaphyllum Viburnum. 8') pH 6.0 to 7.5. A new Viburnum introduced by Arnold Arboretum. Leaves are larger than V. rhytidophyllum and foliage color is a better green. Grows in almost any soil, and while we show the height of 8', it may eventually become larger. -----	22.50
VIBURNUM rhytidophyllum (Leatherleaf Viburnum. 6') pH 6.0 to 7.5. Large oblong deep green leaves. Evergreen. Will grow in very poor soil. -----	15.00
VIBURNUM sieboldi (Siebold Viburnum. 30') pH 6.0 to 7.5. Creamy white flowers in flat clusters in May followed by red to black berries in summer. Long leaves with desirable branching habit and red fall color. -----	12.00
VIBURNUM tomentosum (Doublefile Viburnum. 8') pH 6.0 to 7.5. White flowers borne in flat heads in June. Red to black berries. -----	12.50
WEIGELIA Abel Carriere (Abel Carriage Weigela. 9') pH 6.0 to 7.5. Probably the most desirable of the pink blooming Weigelas. The flowers are large and in profusion, and the plant is much more attractive than the old Weigela. -----	9.00
WEIGELA Eva Rathke (Red Flowering Weigela. 5' pH 6.0 to 7.5. One of the most popular deciduous shrubs. Excellent red blooms in large numbers beginning in mid-May. More or less a specialty with us. -----	9.00
WEIGELA floribunda (Crimson Weigela. 8') pH 6.0 to 7.5. A more uprite form of greater hardiness than some of the other red Weigelas. Blooms are crimson and appear in May. -----	9.00
WEIGELA nana variegata (Variegated Weigela. 5') pH 6.0 to 7.5. Light pink flowers in May and June. Planted especially for its variegated leaves which actually appear to be hand painted. Dwarf compact habit. -----	9.00



AZALEAS

Prices are "per 100"; 50 or more 2" banded plants at the 100 rate. Minimum orders, 50 of a variety.

GABLES HYBRID AZALEAS: This group contains plants of a wide range of colors; some are very dwarf; others tall and upright. We consider the Gables of the best for our area where temperatures range to and sometimes below zero. Those marked with asterisk (*) we have only in small quantities.

Prices: 2" bands \$15.00 per 100.

BIG JOE. Spreading medium height. Early midseason. 2½" purplish violet. One of Joe's best.

BILLY GABLE. Low dense, bright pink.

BOND STREET. Medium spreading; midseason; 2" single; pink.

BOUDOIR (18G) Spreading; late midseason; single 1½"; violet red with darker blotch.

CAMEO (2G) Upright; medium height; late; full double flowers; 1½" shell pink.

CAMPFIRE (F3G). Round spreading, low; very hardy; single hose-in-hose; 1½" brilliant red.

CAROL (B8G) Low, late midseason; single hose-in-hose; 1¼"; violet red; very hardy.

CAROLINE GABLE (96G) Tall upright; hardy; late midseason; single hose-in-hose; 1½" red with darker blotch.

CORSAGE (16G) Medium spreading; strong grower; single 2½" orchid; fragrant.

ELIZABETH GABLE (21G) Spreading; medium height; late; single frilled; 2½" red with darker blotch; very hardy.

FLAME GABLE (C4G) Medium height; early midseason. Flame red.

GABLES POUKHANENSIS HYBRID (51G) Low spreading; early midseason; very hardy; single 3"; orchid pink.

HERBERT (47G) Spreading; medium height; early midseason; single hose-in-hose; frilled; 1¾" reddish violet.

ISABEL. Tall upright; midseason; single hose-in-hose; 1½" pink.

JAMES GABLE (F1G) Tall, spreading; early midseason; single hose-in-hose; 2" red with darker blotch.

LORNA (C8G) Low, dense, spreading; late double hose-in-hose; 1¾"; free growing violet red.

LOUISE GABLE. (13G) Spreading; low dense; late; double or semi-double; 2¼" violet red.

MARYANN (38G) Low, dense, spreading; midseason; semi-double; 2¼" violet red; profuse bloomer.

MARY FRANCES HAWKINS (C3G) Tall, spreading; late; single; hose-in-hose; 2"; pink; hardy.

MILDRED MAE (69G) Tall, vigorous spreading; early midseason; single 2¾"; reddish violet with brown blotch.

MONTROSE. Medium height; spreading; early midseason; 1½" rose pink.

MRS. C. C. MILLER. Medium height, very late, bright orange-red. Quite hardy.

OLD FAITHFUL. Early midseason; single; 2¼" reddish violet.

PURPLE SPLENDOR (C1G) Tall; upright; midseason; single hose-in-hose; frilled 1¾" dark purple.

ROSEBUD (B5G) Low, spreading, dense; double rose-like blooms 1¾". Deep pink or violet red.

ROSE GREELEY (D3G) Low spreading; dense; early midseason; single hose-in-hose; white; sweetscented.



ROYALTY (A27G) Low, spreading, late double; $1\frac{1}{2}$ " reddish violet.

SUSAN (54G) Spreading; medium hardy; very late; single; $2\frac{1}{4}$ " salmon pink.

VIOLA (50G) Spreading; tall, large; early midseason; single; $2\frac{3}{4}$ ", red with darker blotch.

H12G. A late bright scarlet double flowering sort not yet named.

* **J13G.** Spreading; midseason; 2" single; hose-in-hose; terracotta shade.

* **152G.** Medium height; midseason; single deep pink.

19G. Broad spreading; dense; $2\frac{1}{2}$ " watermelon pink.

51G. Spreading; late midseason; single 3" orchid.

GLENN DALE AZALEAS: Until the '54-55 winter, this group was thought by many nurserymen to consist of varieties which could be classed as dependably hardy only as far north as Baltimore and Washington. However, the winter of '54-55 sorted the sheep from the goats. Many of the Glenn Dales went through several nights of 5 to 8 degrees, and not only suffered no damage, but set full crops of blooms. Others of the Glenn Dale group did show much winter damage, but of the varieties listed below all came through in fine condition. Most of this group are especially desirable for extremely large flowers, which of course makes them very showy plants. Those marked with an asterisk (*) we have only in very limited quantities.

Prices: 2" bands \$15.00 per 100.

ANTHEM. Medium tall; upright; late midseason; 3" rose pink.

APHRODITE. Erect branches on low shrub; midseason; free flowering; 2" pale rose pink.

BUCCANEER. Erect, early; 2" brilliant orange-red.

GAIETY. Spreading, medium height; single; 3" rose pink; late midseason.

GLACIER. Upright; medium height; early midseason; single; $2\frac{1}{4}$ "; white; very fine.

HARLEQUIN. Spreading, medium height, single 2" white flake violet. Late midseason.

* **NERISSA.** Medium height; spreading; single; $1\frac{1}{2}$ "; pink with faint yellow; very fine.

TREASURE. Medium height; spreading; early midseason; single $3\frac{1}{2}$ " to $4\frac{1}{2}$ " white; better than indica alba which it resembles.

KAEMPHERI HYBRID AZALEAS: Most are tall, and hardier than the Kurumes; handsome plants, with ample blooms; and they follow each other to cover a long period of the season. Excellent growers; very little pampering required. Those marked with an asterisk (*) we have only in very limited quantities.

Prices: 2" bands \$15.00 per 100.

ALICE. Medium height; early midseason; single 2"; camellia rose with dark blotch.

BETTY. medium height; upright; early midseason; single; 2"; red.

CARMEN. Tall, upright; early midseason; single; $2\frac{1}{2}$ " crimson red with brown blotch.



FEDORA. Medium height; upright; early midseason; 2" violet red.

FLAME. Medium, upright; 2"; flame red.

GRETCHEN. Medium height; upright; late midseason; single; 2" reddish violet with blotch.

HINOMAYO. Upright, tall; early midseason; single, 1 $\frac{1}{4}$ " red.

* **MAROON.** Tall, compact; midseason; single 2 $\frac{1}{2}$ " to 3"; maroon.

MRS. DOORENBOS. Medium height; upright; single 2 $\frac{1}{4}$ "; vermillion red.

OTHELLO. Medium height; upright; early midseason; single 2"; claret red.

PURPLE KING. Tall upright; early midseason; single 1 $\frac{3}{4}$ "; purple.

KURUME AZALEAS: America's best known and most popular group of evergreen Azaleas. Most are dwarf in habit of growth, although some few are upright. All are dense and shapely. Most bloom early or early midseason. Those marked with an asterisk (*) we have only in very limited quantities.

Prices: 2" bands \$15.00 per 100, except hinodegiri and hexe which are \$12.50 per 100.

AMOENA (Amoenum) Medium tall; spreading; dense; early midseason; single; hose-in-hose; $\frac{7}{8}$ "; violet red; quite hardy.

AMOENA COCCINEA (Amoenum) Medium height; spreading; dense; early midseason; single; hose-in-hose; $\frac{7}{8}$ "; red; hardier than many in this group.

AMOENA SUPERBA (Amoenum) Same as above but dark purple.

BRIDESMAID. Low, compact. Single. Light salmon.

CARMINITA SPLENDENS (Amoenum) Medium height; spreading; dense; early midseason; bright red.

CORALBELLS. Low spreading; early midseason; single; hose-in-hose; 1 $\frac{1}{8}$ "; deep pink.

* **DOUBLE HINODEGIRI.** Same as hinodegiri except that blooms are hose-in-hose.

ELEANOR ALLEN. Similar to Hinodegiri in growth, etc., but blooms are fine pink.

FLAME KURUME. (Proper name Benefudi) Low; early, evergreen; salmon.

HEXE. Spreading; low, dense; late midseason; hose-in-hose; 1 $\frac{3}{4}$ "; violet red.

HINOCRIMSON. Spreading; medium height; early midseason; 1 $\frac{1}{2}$ " red.

HINODEGIRI. Spreading; medium height; early midseason; single; 1 $\frac{1}{2}$ " red.

MARJORIE ANN (Pericat) Spreading, low dense; early midseason; semi-double; 1 $\frac{1}{4}$ " red.

MRS. L. C. FISCHER. Upright, medium height; late midseason; single hose-in-hose.

PINK PEARL. Low compact, deep pink.

SALMON BELLS. Low spreading; early midseason; single; hose-in-hose; 1 $\frac{1}{8}$ "; salmon pink.

SALMON BEAUTY. Upright medium height; early midseason; single hose-in-hose; 1 $\frac{3}{4}$ " red.

SHERWOODI (or Sherwood Orchid). Medium height; spreading; early midseason; 2"; orchid; hardier than most in Kurume group.

SHERWOOD CERISE. Same as above, but with cerise pink blooms.



SHERWOOD RED. Same as above but with blood red blooms.

SNOW. Medium height; uprite; dense; early midseason; single; hose-in-hose; excellent white.

* **SWEETBRIAR.** Medium height; spreading; early midseason; single hose-in-hose; $1\frac{1}{2}$ "; white flushed red.

MUCRONATUM AZALEAS: Hardy along the East Coast to Long Island. Most varieties have delicate fragrance. Vigorous growing plants, with large flowers.

Prices: 2" bands \$15.00 per 100.

DELAWARE VALLEY WHITE. Large single snow white blooms midseason. Hardier than indica alba.

INDICA ALBA. (or ledifolia alba) Medium to tall; spreading; early midseason; single 3"; pure white.

VUYKIANA AZALEAS: These are reported to be hybrids of a mollis variety and kaempheri. That should give them unusual hardiness. In any event, late blooming, large flowers, and good colors make these very desirable Azaleas. Those marked with an asterisk (*) we have only in very limited quantities.

Prices: 2" bands \$15.00 per 100.

ANTIQUE. Medium height; very double; $2\frac{3}{4}$ "; deep pink; very fine blooms three weeks after hinodegiri.

DOUBLE RED. Medium height; spreading; $2\frac{1}{2}$ "; late midseason; double red.

HELENA VUYK. Medium height; single; $2\frac{1}{2}$ " violet red with darker blotch.

MOZART. Medium height; $2\frac{1}{2}$ "; single; late midseason; violet red.

PALESTRINA. (or Wilhelmina) Medium height; single; $2\frac{1}{4}$ "; white with chartreuse blotch; late midseason; very fine white.

* **ROSE RED.** Medium height; compact; late; $3\frac{1}{2}$ " single; deep rose.

SIBELIUS. Medium height; compact; late midseason; 2"; orange red with chocolate blotch.

SPECIES AZALEAS: These are natives of America and the Orient. As a whole they are very hardy. All are nursery grown from seeds and are 2 year or 3 year plants.

Prices: 2" bands \$12.50 per 100.

KAEMPHERI HYBRIDS (from seeds). Likely of any color and form from open pollinated seeds.

MOLLIS HYBRIDS. Tall uprite; deciduous; single $2\frac{1}{2}$ " to 3"; blooms from pure white through yellow orange, pink to red.

MUCRONULATUM: Medium tall; spreading; deciduous; very hardy; Korean and Siberian native. Blooms early and freely with Forsythia; single 2", pleasing rose purple.

POUKANENSIS. (Korean Azalea). Persistent leaved, but not evergreen as Kurumes, etc. Low, spreading, early midseason; single 2"; reddish violet. Mild fragrance; very hardy.

SCHLIPPENBACHI. Tall; spreading; deciduous; extremely hardy; native to Northern Korea and Manchuria; early; single 2-4" flowers; white flushed violet.

VISCOSUM. (Swamp Azalea). Hardy from Maine to South Carolina. Mostly uprite forms, densely branched. Blooms in July; 1 to $1\frac{1}{2}$ " flowers, Strong spicy scent. Very hardy.



Liners in Clay Pots

Prices are "per 100"; 11 - 4" pots make a flatfull, and you'll do us a favor if you order in units of 11: 100 rates apply to 11, or multiples of 11. 20 - 3" pots make a flatfull and 100 rates apply to 20 or multiples of 20; not less than "flatfulls" are sold. Pots go with the plants.

ACER ginnala (Amur Maple. 20') pH 6.0 to 7.5. Small tree with comparatively small leaves and extremely hardy. Winged fruit conspicuous because of its scarlet color. A good small tree for specimen or screening. 3" pots. ----- 25.00

COTONEASTER horizontalis (Rockspray Cotoneaster. 3') pH 6.0 to 7.5. One of the most popular of the Cotoneasters. Flat, horizontal branches with bright red berries in early fall. 3" pots. ----- 35.00

EXOCHORDA giraldi wilsoni (Wilson's Pearlbush. 15') pH 6.0 to 7.5. The most floriferous of the Pearlbushes with the largest flowers. Vigorous grower and no doubt the best of the Pearlbushes. Grafts in 3" pots. ----- 40.00

FRANKLINIA alataamaha (Gordonia or Franklinia. 30') pH 5.0 to 6.0. A rare small tree with 3" white flowers with yellow stamens in Sept. to frost. Red and orange foliage in fall. This plant should be planted in peaty soil and mulched through winter. 3" pots. ----- 35.00

MAGNOLIAS.

soulangeana (Saucer Magnolia. 15 to 18') pH 5.0 to 7.0. Huge pink flowers in great numbers in May before leaves appear. The most popular and best known, but blooms so early that we usually lose the flowers here. In spite of that fact it is still our most popular local Magnolia. — 3" pots. ----- 35.00

4" pots. ----- 50.00

soulangeana alexandrina (Alexander Saucer Magnolia. 15 to 18') pH 5.0 to 7.0. One of the best growers of the Chinese Magnolias. Blooms are darker in color and somewhat later to appear. — 3" pots. ----- 35.00

4" pots. ----- 50.00

soulangeana nigra (Purple Magnolia. 15 to 18') pH 5.0 to 7.0. Dark purple outside white inside of flowers in early June. This one is always satisfactory with us, because it misses our last freeze. — 3" pots. ----- 35.00

4" pots. ----- 50.00

stellata (Star Magnolia. 8 to 10') pH 5.0 to 7.0. Fragrant semi-double star shaped white flowers in mid-April before leaves. One of the higher priced Magnolias. 3" pots. ----- 35.00

waterlily (8 to 10') pH 5.0 to 7.0. A hybrid of *M. stellata* and *M. soulangeana*. Blooms mid-May with large many petaled flowers. New and distinct. 3" pots. 35.00

PYRACANTHA cocc. lalandi (Laland's Firethorn. 8') pH 6.0 to 7.5. Semi-evergreen here. In protected spots foliage remains all winter. Planted for its great profusion of orange berries in clusters in fall and winter. Probably the hardiest of the *P. coccinea* group. Should be grown in containers because roots range over wide area, making it difficult to transplant. Makes up fast. One of the finest money-makers for both nurseries and Garden Shops. 3" pots. ----- 35.00



DELIVERY SERVICE

We get hundreds of charming letters from our lovely customers about our natty delivery service. And always our hat gets tighter. They keep on bragging about the fine condition of their plants on arrival, and also about the courtesy and helpfulness of our deliverymen.



We don't want to seem too mellow about it, but we like this delivery service no little ourselves. It sure makes happy customers. And it's designed to cost you just as little as possible. Needless to say, we can't illustrate rates too all points, but following are some samples. The figures are for a flatful of plants. A flatfull is anyone of the following:

- 50 — 2" bands
- 24 — 3" bands
- 12 — 4" bands
- 20 — 3" clay pots
- 11 — 4" clay pots
- 6 — 5" clay pots

Minimum charge for a stop is \$2.00. Rate A is per flat for any number of flats up to and including 19 flats; rate B is for 20 to 99 flats; Rate C is for 100 to 269 flats; Rate D is for 270 flats or more.

CONNECTICUT:	A	B	C	D
Bridgeport	.75	.67	.50	.34
Danielson	.83	.74	.55	.37
Hartford	.79	.70	.53	.35
New London	.79	.70	.53	.35
Putnam	.83	.74	.55	.37
Torrington	.75	.67	.50	.34
Waterbury	.75	.67	.50	.34

DELAWARE	A	B	C	D
Dover	.53	.47	.35	.24
Milford	.59	.52	.39	.26
Selbyville	.59	.52	.39	.26
Wilmington	.53	.47	.35	.24

ILLINOIS:	A	B	C	D
Bellville	1.05	.93	.70	.47
Bloomington	1.01	.90	.68	.45
Cairo	1.09	.97	.73	.49
Centralia	1.05	.93	.70	.47
Chicago	1.01	.90	.68	.45
Freeport	1.09	.97	.73	.49
Jacksonville	1.09	.97	.73	.49
Joliet	1.05	.93	.70	.47
Lincoln	1.05	.93	.70	.47
Mount Vernon	1.05	.93	.70	.47
Paris	.98	.87	.65	.44
Peoria	1.05	.93	.70	.47
Rock Island	1.09	.97	.73	.49
Springfield	1.05	.93	.70	.47



INDIANA:	A	B	C	D
Bedford	.98	.87	.65	.44
Connersville	.90	.80	.60	.40
Elkhart	.90	.80	.60	.40
Evansville	1.01	.90	.68	.45
Indianapolis	.90	.80	.60	.40
Lafayette	.94	.83	.63	.42
Muncie	.90	.80	.60	.40
New Albany	.94	.83	.63	.42
South Bend	.98	.87	.65	.44
Terra Haute	.98	.87	.65	.44
Valparaiso	1.01	.90	.68	.45
Vincennes	1.01	.90	.68	.45

IOWA:				
Davenport	1.09	.97	.73	.49
Des Moines	1.24	1.10	.82	.55
Sioux City	1.39	1.23	.92	.62

MAINE:				
Bangor	1.01	.90	.68	.45
Brunswick	.90	.80	.60	.40
Presque Isle	1.13	1.00	.75	.50
Sanford	.86	.77	.58	.39
Waterville	.94	.83	.63	.42

MARYLAND:				
Annapolis	.48	.42	.32	.21
Baltimore	.42	.37	.28	.19
Cambridge	.48	.42	.32	.21
Cumberland	.42	.37	.28	.19
Frederick	.36	.32	.24	.16
Salisbury	.59	.52	.39	.26

MASSACHUSETTS:				
Boston	.83	.74	.55	.37
Fall River	.83	.74	.55	.37
Great Barrington	.75	.67	.50	.34
Newburyport	.86	.77	.58	.39
Northampton	.79	.70	.53	.35
Plymouth	.86	.77	.58	.39
Rockland	.83	.74	.55	.37
Springfield	.79	.70	.53	.35
Worcester	.83	.74	.55	.37

MICHIGAN:				
Adrian	.90	.80	.60	.40
Ann Arbor	.90	.80	.60	.40
Bay City	.94	.83	.63	.42
Cadillac	1.01	.90	.68	.45
Cheboygan	1.05	.93	.70	.47
Detroit	.90	.80	.60	.40
Flint	.94	.83	.63	.42
Lansing	.90	.80	.60	.40
Muskegon	.98	.87	.65	.44

NEW HAMSHIRE:				
Berlin	.94	.83	.63	.42
Franklin	.86	.77	.58	.39
Keene	.79	.70	.53	.35
Lebanon	.83	.74	.55	.37
Manchester	.83	.74	.55	.37
Rochester	.86	.77	.58	.39



	A	B	C	D
NEW JERSEY:				
Camden	.53	.47	.35	.24
Elizabeth	.64	.57	.43	.29
Newton	.70	.62	.47	.31
Ocean City	.64	.57	.43	.29
Trenton	.64	.57	.43	.29
NEW YORK:				
Albany	.75	.67	.50	.34
Babylon	.64	.57	.43	.29
Binghampton	.70	.62	.47	.31
Buffalo	.70	.62	.47	.31
Elmira	.64	.57	.43	.29
New York City	.64	.57	.43	.29
Ogenburg	.83	.74	.55	.37
Plattsburg	.86	.77	.58	.39
Poughkeepsie	.75	.67	.50	.34
Rochester	.70	.62	.47	.31
Utica	.75	.67	.50	.34
OHIO:				
Ashtabula	.75	.67	.50	.34
Cincinnati	.83	.74	.55	.37
Cleveland	.75	.67	.50	.34
Columbus	.75	.67	.50	.34
Dayton	.83	.74	.55	.37
Defiance	.90	.80	.60	.40
East Liverpool	.64	.57	.43	.29
Mansfield	.79	.70	.53	.35
Portsmouth	.79	.70	.53	.35
Sandusky	.79	.70	.53	.35
Springfield	.83	.74	.55	.37
Toledo	.86	.77	.58	.39
Wooster	.70	.62	.47	.31
PENNSYLVANIA:				
Bradford	.64	.57	.43	.29
Carbondale	.64	.57	.43	.29
Easton	.53	.47	.35	.24
Johnstown	.48	.42	.32	.21
Lock Haven	.59	.52	.39	.26
Philadelphia	.53	.47	.35	.24
Punxsutawney	.48	.42	.32	.21
Sharon	.75	.67	.50	.34
Washington	.64	.57	.43	.29
Williamsport	.59	.52	.39	.26
RHODE ISLAND:				
Any Point	.83	.74	.55	.37
VIRGINIA:				
Alexandria	.42	.37	.28	.19
Bristol	.79	.70	.53	.35
Petersburg	.53	.47	.35	.24
Roanoke	.59	.52	.39	.26
Suffolk	.64	.57	.43	.29
Winchester	.39	.35	.26	.18
WEST VIRGINIA:				
Charleston	.75	.67	.50	.34
Clarksburg	.59	.62	.39	.31
Huntington	.79	.70	.53	.35
Martinsburg	.39	.35	.26	.18
Morgantown	.53	.47	.35	.24
Parkersburg	.70	.62	.47	.31
Princeton	.70	.62	.47	.31
Wheeling	.64	.57	.43	.28



Perennial Liners in Plant Bands

All in 2" Bands. 50 plants to a flat. Minimum orders 50 of a variety.

DICENTRA. (Bleedingheart)

eximia. Fernleaved type. -----	8.00
spectabilis. True old-fashioned. -----	12.50

PHLOX SUBULATA. (Mountain Pinks)

Alexander's Pink Perfection. Excellent pink with deeper red eye. -----	7.50
atropurpurea. Rich wine red. -----	7.50
Blue Emerald. Close compact evergreen foliage with large blue flowers. -----	7.50
Blue Hills. Sky blue. -----	7.50
Elaire. Deep rich, rose pink, upright to 12". -----	7.50
Emerald Pink. Close compact evergreen foliage with large pink flowers. -----	7.50
rosea. Rose Pink. -----	7.50
vivid. Pink with dark eye. -----	7.50
White Delight. Better than old "alba" with better foliage and larger flowers. -----	7.50

PATENT NOTICE

Several items in this list are patented. In each case in the descriptive matter, the U. S. Patent number is cited. The prices shown include the royalty, and no further charges will be assessed. In no case does the patent holder of any of these items require you to sell at any specified wholesale or retail minimum prices. You set your own selling prices.

You are not permitted, however to propagate any of these patented items, either from cuttings, grafts, or otherwise for either your own use or for sale. It is only under this condition that these patented items are sold.

Because of differences in growing conditions, grading, etc., from nursery to nursery, we have always felt that established or required prices on patented shrubs or evergreens, either wholesale or retail, mean little or nothing. It is easy to overgrade or undergrade, and thus defeat the purpose of established prices.

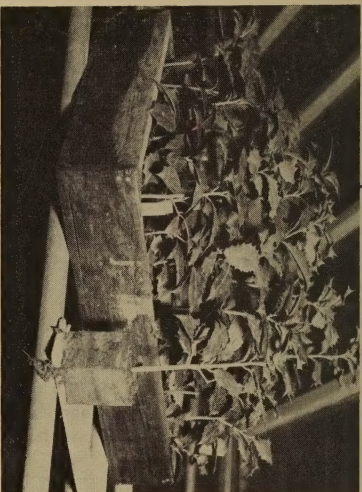
So, in getting agreements from the various patent holders to require that our quoted prices for the liners shall include all of their royalties, and to forget your selling price angle, we believe we have overcome the major objections to patented plants.

BULK RATE

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POSTMASTER: — RETURN POSTAGE GUARANTEED

APPALACHIAN NURSERIES
WAYNESBORO, PENNA.



Ilex opaca (American Holly). We have them in quantity and quality; both named and unnamed, and all from northern varieties. See pages 19 and 22.

